

SAN FRANCISCO BAY REGION

ORDER NO. 87-9

SITE CLEANUP REQUIREMENTS AND RESCISSION OF
ORDER NO. 85-109 FOR:

PRECISION MONOLITHICS, INC.
SPACE PARK DRIVE FACILITY
CITY OF SANTA CLARA
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Precision Monolithics, Inc., hereinafter called the discharger, owns and operates an integrated circuits manufacturing facility located at 1500 Space Park Drive in the City of Santa Clara, Santa Clara County, approximately 1/2 mile southeast of the intersection of Route 101 and Montague Expressway. The Board adopted Order No. 85-109 on September 18, 1985. This Order supersedes Order 85-109 due to changed conditions.
2. Subsurface investigations initiated in January 1983 detected high levels of various industrial solvents, including trichloroethane, trichloroethylene, dichloroethylene, benzene derivatives, ketones, and alcohols, in groundwaters beneath the facility. The above chemicals, which are associated with the type of manufacturing operations conducted presently and in the past by the discharger, were found localized on the discharger's site with no evidence of off site migration accounting for their presence.
3. As of November 1986, discharger studies indicated that the solvent contamination extended vertically to a sand and gravel aquifer to a depth of approximately 40 feet and horizontally a distance of about 1000 feet downgradient from the area of greatest chemical concentrations which were found on the discharger's property. Onsite groundwater samples have detected trichloroethylene, dichloroethylene, trichloroethane, and chlorobenzene at concentrations exceeding 1000 parts per billion.
4. Remedial actions to date include removal of two solvent waste tanks, and installation of an onsite groundwater extraction system.
5. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on July 21, 1982. The Basin Plan contains water quality objectives and beneficial uses for South San Francisco Bay and contiguous surface and groundwaters.
6. The existing and potential beneficial uses of the

groundwater underlying and adjacent to the facility include:

- a. Municipal and Domestic Water Supply
 - b. Agricultural Water Supply
 - c. Industrial Service Water Supply
 - d. Industrial Process Water Supply
7. The discharger has caused or permitted, and threatens to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
 8. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
 9. The Board has notified the discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
 10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 and 13267 of the California Water Code, that the discharger shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharger shall conduct monitoring activities as

needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required.

C. PROVISIONS

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program prescribed by or amended by the Board's Executive Officer.
2. The discharger shall comply with Prohibitions A.1., A.2., and A.3., and Specifications B.1 and B.2 in accordance with the following time schedule and tasks:

a. COMPLETION DATE: May 1, 1987

TASK: Submit a technical report satisfactory to the Executive Officer which:

- (1) documents the installation of offsite extraction wells
- (2) identifies the proposed method of treatment of the extracted offsite groundwaters
- (3) describes the measures taken and/or proposed to be taken to monitor and evaluate the adequacy of the system to contain and cleanup the offsite pollutant plume.

b. COMPLETION DATE: October 5, 1987

TASK: Submit a technical report satisfactory to the Executive Officer which documents the installation of and commencement of operation of facilities necessary to treat the extracted groundwater from offsite.

c. COMPLETION DATE: December 1, 1987

TASK: Submit a technical report satisfactory to the Executive Officer which evaluates the effectiveness of the offsite extraction system. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the wells, establishment of the cones of depression by field measurements, and presentation of chemical monitoring data. Specific modifications to the system shall be proposed in the event that the system is demonstrated not to be effective in containing and cleaning up the pollutant plume.

d. COMPLETION DATE: January 5, 1989

Submit a technical report satisfactory to the Executive Officer which contains an evaluation of the interim remedial measures, an evaluation of alternate final remedial measures, and a recommendation on which measures are necessary to achieve a final cleanup objective. The technical report shall include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure, and shall consider guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), Section 25356.1(c) of the California Health and Safety Code, guidance on Remedial Investigations, Feasibility Studies, and Remedial Design and Remedial Action under CERCLA, and the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California."


3. Technical progress reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board commencing on April 1, 1987. On a monthly basis, these reports shall consist of a brief letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, and (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles. On a quarterly basis these reports shall include, but need not be limited to, updated water table and piezometric surface contour maps, pollution concentration contour maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeologic setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures.
4. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or professional engineer.
5. If the discharger is delayed, interrupted, or prevented from meeting one or more of the Completion dates specified in this Order, the discharger shall promptly notify the Executive Officer. In the event of such delays, the Board may consider modification of the task completion dates established in this Order.
6. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.

7. The discharger shall maintain in good working order, and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
8. Copies of all technical reports including those required by Provision C.2, and quarterly reports required by Provision C.3, shall be provided to the following agencies:
 - a. Santa Clara Valley Water District
 - b. Santa Clara County Health Department
 - c. City of Santa Clara
 - d. State Department of Health Services/TSCD
9. The Executive Officer may additionally require copies of correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order to be provided to the U.S. Environmental Protection Agency, Region IX, and to a local repository for public use.
10. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or methodology implemented in response to this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
11. The discharger shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.
12. If any hazardous substance is discharged in or on any Waters of the State, or discharged and deposited where it is, or probably will be discharged in or on any Waters of the State, the discharger shall report such a discharge to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-office hours. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative

to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control, and Counter measure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.

13. Order No. 85-109 is hereby rescinded.
14. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 18, 1987.


Roger B. James
Executive Officer